

Appln No. 10/080,818

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Reply to Office action of September 16, 2003

REMARKS/ARGUMENTS

Claims 1-3, 5-12, 14-17, 19 and 20 are pending herein, with claims 1, 9, 17, 19 and 20 being amended, and claims 4, 13, and 18 being canceled.

The Examiner rejects claims 17 and 20 under 35 U.S.C. 102(b) as allegedly being anticipated by Flamme. The Examiner states that "Flamme discloses a cylindrical female barrel portion (2) (sic) and first and second cylindrical male barrel portions (11, 12) formed from a single section of material. The female barrel portion has an outside surface and interior bore, while the male barrel portions have pin extensions (13, 14) and pin ends substantially as claimed. The female portion comprises seamless cylindrical tubing (tubular part of 20). The two male portions are inserted into the interior bore."

Applicant respectfully submits that Flamme does not anticipate claims 17 or 20. Rejection of a claim under 35 U.S.C. 102(b) requires that each and every element must be present in a claim. This is not the case with claims 17 and 20. As amended, claim 17 recites "a first and second male barrel portion, each male barrel portion [~~formed from a single section of material and~~] having a cylindrical main body portion and a unitary pin extension having a pin length". As amended, this claim makes it clear that the male barrel portions are one piece cylindrical structures and have a unitary pin extension. An examination of the Flamme reference makes it clear that the cabinet side pin portions 11 and 12 (if equated to the recited male barrel portions) are not "cylindrical" and do not have a "unitary pin extension", but as noted at col. 4, lines 40-44,

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and wherein "FIG. 2 shows the press fit of the hinge pin 13 in a sleeve-like receptacle 25 and the construction of the lower hinge pin support 27. The upper, cabinet-side hinge portion 12 is constructed and arranged homologously to the lower hinge portion 11." In the Response to Arguments section, the Examiner states that Applicant fails to address the point that claim 17 recites a "female barrel portion made from a section of seamless tubing..." The door-side hinge part 20 (if considered a female barrel portion) is not "a section of seamless tubing" as set forth in claim 17, but has a "rolled in hinge hole 21". (Col. 3, lines 54-57.) Accordingly, this ground of rejection is traversed.

Turning to the rejection of claim 20, the Examiner states that "Flamme discloses the main body portion of each male portion and female portion to be completely cylindrical (each body portion of Flamme contains a complete cylinder), and that the portions are adapted for welding to objects. The Examiner asserts that the flanged portions (15, 16, and 22) can be welded to an object." Applicant respectfully traverses this ground of rejection. While it is true that there are cylindrical portions in the hinge of Flamme, if, for example, the cylindrical portion of the cabinet hinge portions 11 and 12 were welded to an object, then their base portions 15 and 16 would face up and would destroy the proper operation of the hinge. Accordingly, this ground of rejection is believed to be overcome.

The Examiner next rejects claims 1, 4, 5, 9, 12-14 and 18-19 under 35 U.S.C. 103(a) as being unpatentable over Flamme in view of Kent. The Examiner states that "Flamme discloses a

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cylindrical female barrel portion (20) and first and second cylindrical male a (sic) barrel portions (11, 12). The female barrel portion has a sidewall (21), outside surface, axial bore, and interior wall surface while the male barrel portions have a main body portion (25), outer surface, pin extensions (13), and pin ends (13) substantially as claimed. The female portion comprises seamless cylindrical tubing (tubular part of 20). The two male portions are inserted into the interior bore. Flamme fails to disclose an aperture within the female portion for a lubricant fitting."

The Examiner states that "Kent teaches a female portion (10) with an aperture for a lubricant fitting (58) for the purpose of providing the interior spaces of the cylindrical portions of the hinge with grease. Grease protects various (sic) assemblies from outside contaminants. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a lubricant fitting into an aperture within Flamme's female member in order for the hinge to retain lubrication, which protects the assembly from outside contaminants. (Col 11, line 57- col. 12, line 13)."

Applicant respectfully submits that the Examiner has failed to set forth a prima facie case of obviousness because the Examiner has not shown some teaching, suggestion, or motivation to combine the references, but rather has focused on showing that the references could be modified, and then combined.

The following cases set for a summary of the state of the law as it applies to obviousness grounds of rejection under 35 U.S.C. 103. In *In re Rouffet*, 47 USPQ2d 1453 (Fed. Cir. 1998),

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the Federal Circuit stated that "[w]hen a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. See *In re Grieger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir.2d 1987). Although the suggestion to combine references may flow from the nature of the problem, see *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), the suggestion more often comes from the teachings of the pertinent references, see *In re Sernaker*, 702 F.2d 989, 994, 217 USPQ 1, 5 (Fed. Cir. 1983), or from the ordinary knowledge of those skilled in the art that certain references are of special importance in a particular field, see *Pro-Mold*, 75 F.3d at 1573 (citing *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297 n.24, 227 USPQ 657, 667 n.24 (Fed. Cir. 1985)). Therefore, "[w]hen determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." See *In re Beattie*, 974 F.2d 1309, 1311-12, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting *Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co.* 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984))."

The Federal Circuit has stated that "virtually all [inventions] are combinations of old elements." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 USPQ 865,870 (Fed. Cir. 1983.) Therefore an examiner may often find every element of a claimed invention in the prior art. If

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identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blue-print for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Subsonic, Inc. v. Aero sonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

Turning back to the combined references, the Flamme reference is directed to a separable hinge, such as for affixation to a switch-cabinet and instrument-cabinet doors. Flamme states that "[I]n order to ensure that the hinge parts can be separated and reassembled rapidly and simply, the invention calls for at least one hinge part (10, 40) to be designed in two elements, via a first and a second element (11, 12; 41, 42) and that the first and second element (11, 12; 41, 42) can be displaced relative to each other in the longitudinal direction to enable the other part (20; 50) to be inserted and withdrawn again." (See Abstract.) This feature is made possible by the sliceable base portions 15 and 16 to which the male portions are connected. As can be seen in FIG. 6, the hinge pins 13 extend just a short distance outside of hinge pin supports 27 and when engaged with the female portion 22, would just enter the cylindrical bore. Such hinges are typically made for light duty applications, and are therefore not subjected to

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weathering or other forces which would require a lubrication fitting to permit the hinge to be replenished with lubricant.

The Kent reference discloses a locking device for locking a closure (such as an emergency door exit of a bus) in an open position, so that occupants can escape in case of an emergency. The Kent reference specifically discloses that the "[l]ocking device 11 also includes grease seals 54, 56 and grease fitting 58 so that locking device 11 can be lubricated and will retain the lubrication... (See FIG. 2)." Col. 11, lines 57-59. The grease fitting is provided so that the ratchets elements in the locking device can freely move and operate in an emergency situation, which is the critical function of the device. This function may infrequently, if ever, be required, and the locking device is likely to be exposed to the elements, so the grease is probably very important to prevent parts from seizing together. In contrast, with the Flamme hinge, the object is to enable the male portions to be inserted and withdrawn again for quick assembly and disassembly, and Applicant respectfully submits that one having ordinary skill in the art of hinges would accordingly have no motivation to include a grease fitting on the Flamme hinge since lubrication would probably make the assembly a messier project. There is nothing in the Flamme reference that would teach or suggest including a lubrication port. Accordingly, Applicant respectfully requests reconsideration of this grounds of rejection.

Turning to the rejection of claims 18 and 19, please note that the limitations of canceled claim 19 are placed in amended claim 18. The Examiner states that the cylindrical male and

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female portions of the hinge of Flamme can be directly welded to objects. Applicant would respectfully point out that if one attempted to weld the cylindrical parts of the male barrel portion to an object, a chief function of the Flamme hinge (e.g., its ability to quickly assemble and disassemble the hinge) would be lost. Moreover, welding the Flamme hinge as suggested by the Examiner would destroy its function since the base portions 15 and 16 would impinge on the female portion and would interfere with the free operation of the hinge.

The Examiner rejects claims 3 and 11 under 35 U.S.C. §103(a) as allegedly being unpatentable over Flamme in view of Kent as applied to claim 1, and further in view of U.S. patent no. 5,771,538 to Huppert, Sr. However, since the Flamme and Kent references do not teach the basic teaching, Applicant respectfully submits that their combination with Huppert, Sr. likewise fails to render the invention obvious.

The Examiner rejects claims 2 and 10 under 35 U.S.C. §103(a) as allegedly being unpatentable over Flamme in view of Kent as applied to claim 1, and further in view of U.S. patent no. 132,147 to Dodge. The Examiner appears to misunderstand the description of bevels on the female barrel portion and the male barrel portions. In Applicant's invention as recited in claims 2 and 10, the bevels are formed such that when the male barrel portions are inserted into the female barrel portion, a v-shaped groove is formed around the ring of contact. With this claimed design, even if the assembled hinged is painted, the paint will not tend to accumulate around this groove, and thus the hinge can operate more smoothly compared to prior designs where the

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outer edges abut without bevels. Applicant would refer the Examiner to FIG. 2, which shows the prior art, where the barrels do not have beveled edges, and FIG. 5 shows the V-shaped groove formed by the beveled edges of the female barrel next to the male barrels. The Dodge reference does not disclose this arrangement, but instead discloses an arrangement to "exclude rain and dust" from the hinge. Accordingly, Applicant respectfully believes that this ground of rejection is traversed.

The Examiner rejects claims 6, 7, 15 and 16 under 35 U.S.C. 103(a) as allegedly being unpatentable over Flamme in view of Kent as applied to claim 1, and further in view of U.S. patent no. 470,514 to Simpson. For the same reasons that claim 1 is believed not to be obvious, Applicant believes that claims 6, 7, 15 and 16 should be found allowable.

With respect to the Examiner's rejection of claim 8, which states that the "first and second male barrel portions are identical", referring to the Flamme reference, actually, the male portions are not identical, but are mirror images of each other. Accordingly, this ground of rejection is traversed. More fundamentally, for the same reasons that claim 1 is believed not to be obvious, Applicant believes that claim 8 should be found allowable.

The Examiner rejects claims 1 and 8 under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. patent no. 4,573,239 to Valenti in view of Kent. For the same reasons that claim 1 is believed not to be obvious, Applicant believes that claims 6, 7, 15 and 16 should be found allowable.



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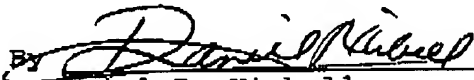
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For the above reasons, Applicant respectfully submits that the claims recite patent subject matter, and Applicant request reconsideration and allowance of the claims. If the Examiner has any remaining questions or suggestions to better put the application in condition for allowance, Applicant would welcome a telephone call from the Examiner.

Respectfully submitted,

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